### STATE OF CALIFORNIA

# **Current/Proposed**

## **DUTY STATEMENT**

CEC-004 (Revised 04/16)

CALIFORNIA ENERGY COMMISSION



Classification:	Position No.	
Mechanical Engineer	430-3583-010	
CBID:	Office:	
.R09	Building Standards	
Date Prepared: July 1, 2016	Division: Efficiency	
KEY: (E) IS ESSENTIAL, (M) IS MARGINAL		

The Mechanical Engineer is under the direction and supervision of the Energy Commission Supervisor II (EFF) in the Building Standards Office of the Efficiency Division. The incumbent will perform a wide variety of field and office mechanical engineering assignments in connection with mechanical engineering design, drafting, and inspection work; and do other related work. The incumbent will also perform engineering tasks and prepare detailed energy efficient engineering analysis, technical studies and investigations for residential building design. In addition, the incumbent will perform mechanical engineering work to identify opportunities for making energy efficiency improvements in the mechanical systems for each of the comprehensive programs for existing residential and nonresidential buildings, and evaluate the impacts of these improvements in terms of energy savings, climate change mitigation, installation and operating cost, cost effectiveness, water use, occupant comfort, building functionality.

**WORKING CONDITIONS:** The work is performed primarily in an office, conference room and hearing room environment. It may require standing and walking, as well as sitting for long periods of time. Some travel is required to attend off-site meetings or participate in meetings, workshops and hearings. Additional hours beyond an eight hour workday or 40-hour workweek may be required. While performing the duties described below, the incumbent will be required to work alone and/or in a team environment, using a personal computer and appropriate Energy Commission software such as word processing, electronic mail, WebEx and Internet browsers.

**DUTIES AND RESPONSIBILITIES:** The incumbent serves as a technical resource person to provide advice for development and adoption of residential and nonresidential energy efficiency building projects and makes recommendations on specific engineering problems to determine the societal costs and benefits of mandatory and voluntary "reach" standards.

- 30% Prepare complete and comprehensive engineering reports, evaluate designs and specifications for components of the building envelope such as fenestration, walls, insulation, and roofing, determine the engineering specifications required for building energy efficiency measures (i.e., lighting, thermal mass) to be incorporated into calculation methods. Perform engineering evaluation of the economic impact and energy savings of alternative building designs to verify cost effectiveness of the measures for adoption of the Standards. (E)
- 30% Perform engineering research work and analysis related to improvements of the building envelope and recommend for consideration and adoption in the Standards. Provide engineering support to the development of energy analysis computer programs and to determine the engineering assumptions included in applications for approval of new calculation methodologies and energy analysis computer programs which determine

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compliance with the building performance standards used widely by the building industry. (E)

- 10% Prepare complete responses to engineering correspondence and phone inquiries about building designs, drawings and specifications from building officials and the building industry requesting assistance in checking building plans. Provide engineering review of building plans for compliance with the energy efficiency standards. (E)
- 10% Serve as a technical resource person and provide professional engineering advice and prepare and present expert witness testimony on complex building design questions and manage complex engineering contracts to develop building designs and specifications. (E) Occasional travel may occur in order to perform this task. (M)
- 10% Develop and maintain working relationships with key industry stakeholders and respond to requests for technical engineering assistance and information from the public, governmental agencies, utilities, and other organizations interested in energy efficiency policy, programs, and technologies. (E)
- 5% Organize, conduct and participate in workshops, hearings, conferences, briefings and training sessions. (M)
- 5% Perform other duties as required consistent with the specifications of this classification. (M)

SIGNATURES			
I Certify That I Am Able To Perform, With Or Without The Assistance Of A Reasonable Accommodation, The Essential Job Duties Of This Position			
Vacant	Date	Peter Strait	Date
Mechanical Engineer		Energy Commission Supervisor II (EFF)	